

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019197**Date Inspected:** 10-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12BE/12CE

This QA Inspector observed Flux Cord Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SP3005-001-031, Side Plate I-rib splice. The welder is identified as #047353 and was observed welding in the 3G (vertical) position using Welding Procedure Specification WPS-B-T-2233T-ESAB.

This QA Inspector observed Flux Cord Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE12E-003, Side Plate transverse splice. The welder is identified as #052763 and was observed welding in the 3G (vertical) position using Welding Procedure Specification WPS-B-T-2233T-ESAB-1.

This QA Inspector observed Flux Cord Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA6502-011, Side Plate transverse splice. The welder is identified as

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#040367 and was observed welding in the 3G (vertical) position using Welding Procedure Specification WPS-B-T-2233T-ESAB-1.

Segment 12BW/12CW

This QA Inspector observed Flux Cord Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW12C-001, Bottom Plate transverse splice. The welder is identified as #049220 and was observed welding in the 1G (vertical) position using Welding Procedure Specification WPS-B-T-2231T-ESAB.

Segment 12BE

This QA Inspector observed Flux Cord Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3002A-001, Side Plate to Bottom Plate hold back weld. The welder is identified as #040458 and was observed welding in the 1G (flat) position using Welding Procedure Specification WPS-B-T-2231-ESAB.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3002A-004, Side Plate to Bottom Plate hold back weld. The welder is identified as #040458 and was observed welding in the 1G (flat) position using Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for CWR2703 R1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated SP3005-001-025, 026, Side Plate WT stiffener hold back weld. The welder is identified as #040270 and was observed welding in the 2F (horizontal) position using Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated SP3007-001-034, 035, Side Plate WT stiffener hold back weld. The welder is identified as #040504 and was observed welding in the 2F (horizontal) position using Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated SP3008-001-028, 029, Side Plate WT stiffener hold back weld. The welder is identified as #052910 and was observed welding in the 2F (horizontal) position using Welding Procedure Specification WPS-B-P-2112-FCM-1.

Segment 12CE

This QA Inspector observed Flux Cord Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3003A-011, Side Plate to Bottom Plate hold back weld. The welder is identified as #040458 and was observed welding in the 1G (flat) position using Welding Procedure Specification WPS-B-T-2231-ESAB.

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This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated SP3009-001-027, 028, Side Plate WT stiffener hold back weld. The welder is identified as #040270 and was observed welding in the 2F (horizontal) position using Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated SP3011-001-016, 017, Side Plate WT stiffener hold back weld. The welder is identified as #040504 and was observed welding in the 2F (horizontal) position using Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated SP3012-001-025, 026, Side Plate WT stiffener hold back weld. The welder is identified as #052910 and was observed welding in the 2F (horizontal) position using Welding Procedure Specification WPS-B-P-2112-FCM-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Shi Lie and Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS.

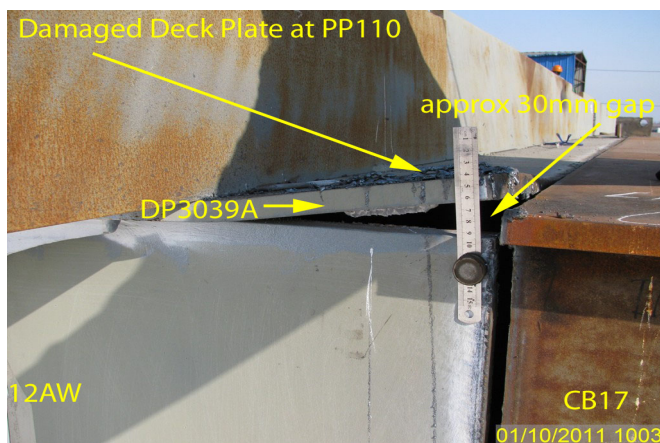
Segment 12AW

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments in the Trial Assembly area, this QA inspector discovered the following issue:

- Deck plate has been damaged/Bent (30mm) during the movement of CB17 for the trial fit up to lift 12 West.
- Deck Plate damaged at Panel Point 110.
- Deck Plate is identified as: DP3039A and is 20mm in thickness
- The material is identified as Non-Seismic Performance Critical Member (non-SPCM).

An Incident Report was written for this issue.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

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No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
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Reviewed By:	Dsouza,Christopher	QA Reviewer
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